ABSTRACT OF THE DISCLOSURE

A port adapter for connecting zero or more network interfaces to a host system having a SPI-4 bus is disclosed. The port adapter comprises zero or more network interfaces; a SPI-4 bus coupled to a host system to provide a communication channel between the host and the network interfaces; a control bus coupled to the host system for controlling and monitoring the port adapter; and interface logic that interfaces the SPI-4 bus and the control bus to the network interfaces. Methods are provided for selecting and using one of a small plurality of different packet formats for various networking technologies, so that the port adapter can hide details of the technology that it handles from the host system, and for operating the host system's SPI-4 bus at one of several speeds based on bandwidth requirements of the port adapter.